

Supporting Information for “Circulation and meltwater distribution in the Bellingshausen Sea: from shelf break to coast”

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Additional Supporting Information (Files uploaded separately)

1. Captions for large Tables S1

Introduction This file includes three additional figures and one table in support of the main text. The table contains detailed information on individual CTD-SRDL tags used in this study.

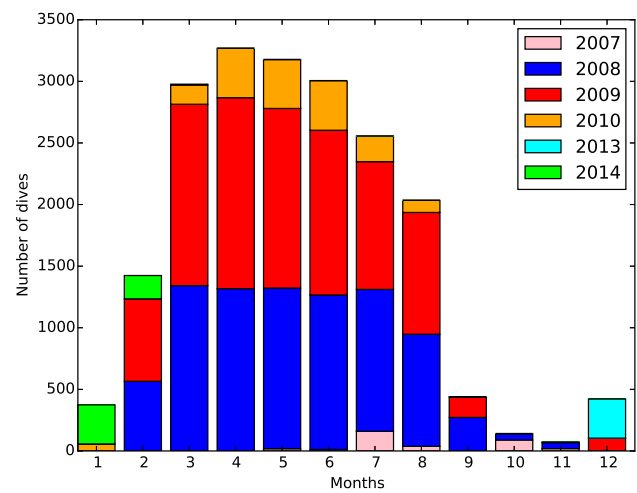


Figure S1. Monthly distribution of data used in this study in Bellingshausen Sea, colored by years.

Table S1. Identification information of all CTD-SRDL tags used in this study with references.

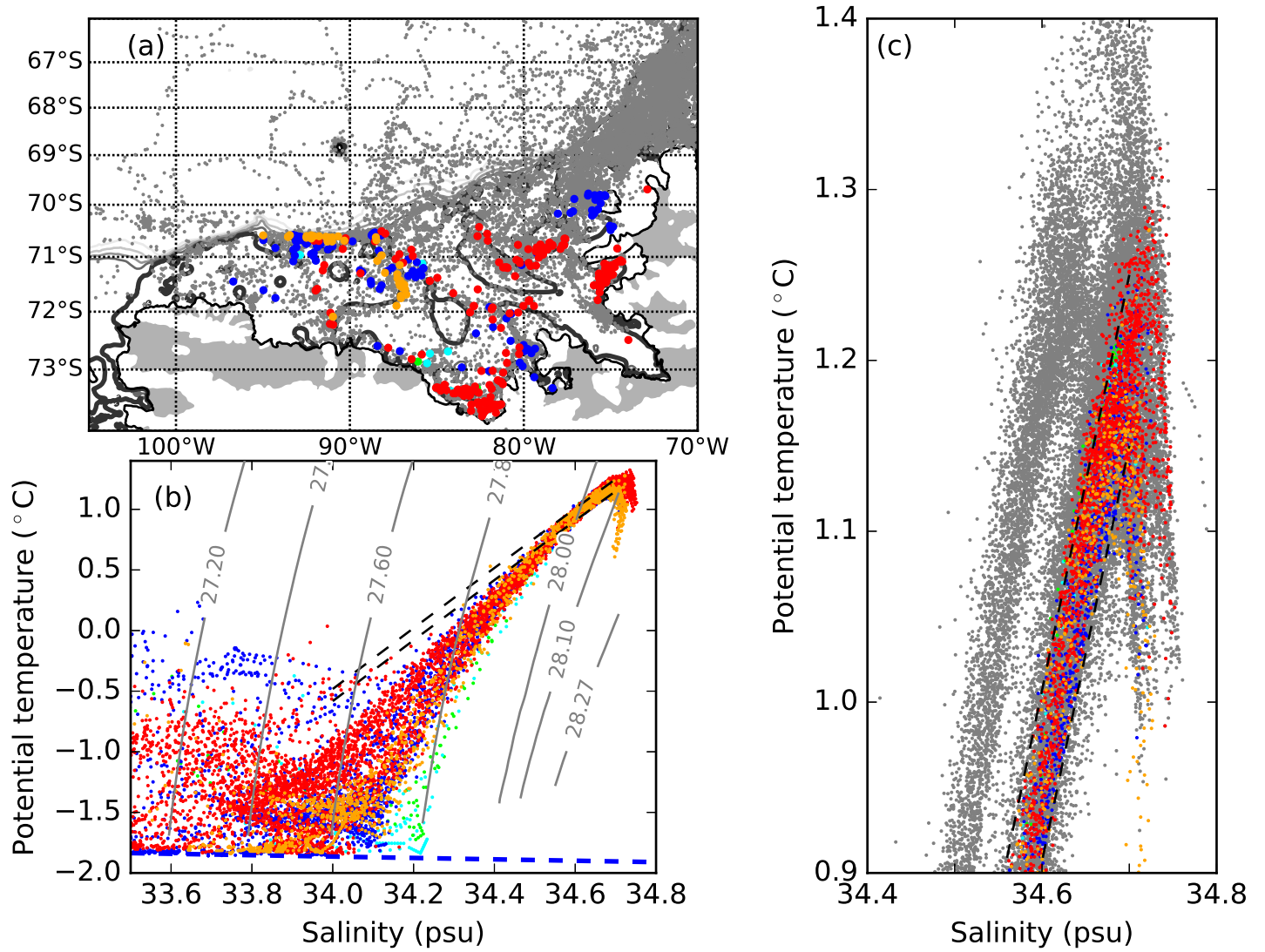


Figure S2. Seal dives that show a ice shelf melt water mixture indicated by falling on the Gade line. (a) Locations of the seal dives, colored by years. (b) Potential temperature-salinity diagram of the profiles with the same color coding. The black dashed line shows the Gade envelope described in Appendix. Gray contours show the neutral density surfaces in the BS region. Blue dashed line shows the freezing point at the surface. (c) Detailed diagram of (b) showing the meltwater mixture layer. The grey dots are casts that do not fall within the Gade envelope, corresponding to the grey dots on (a).

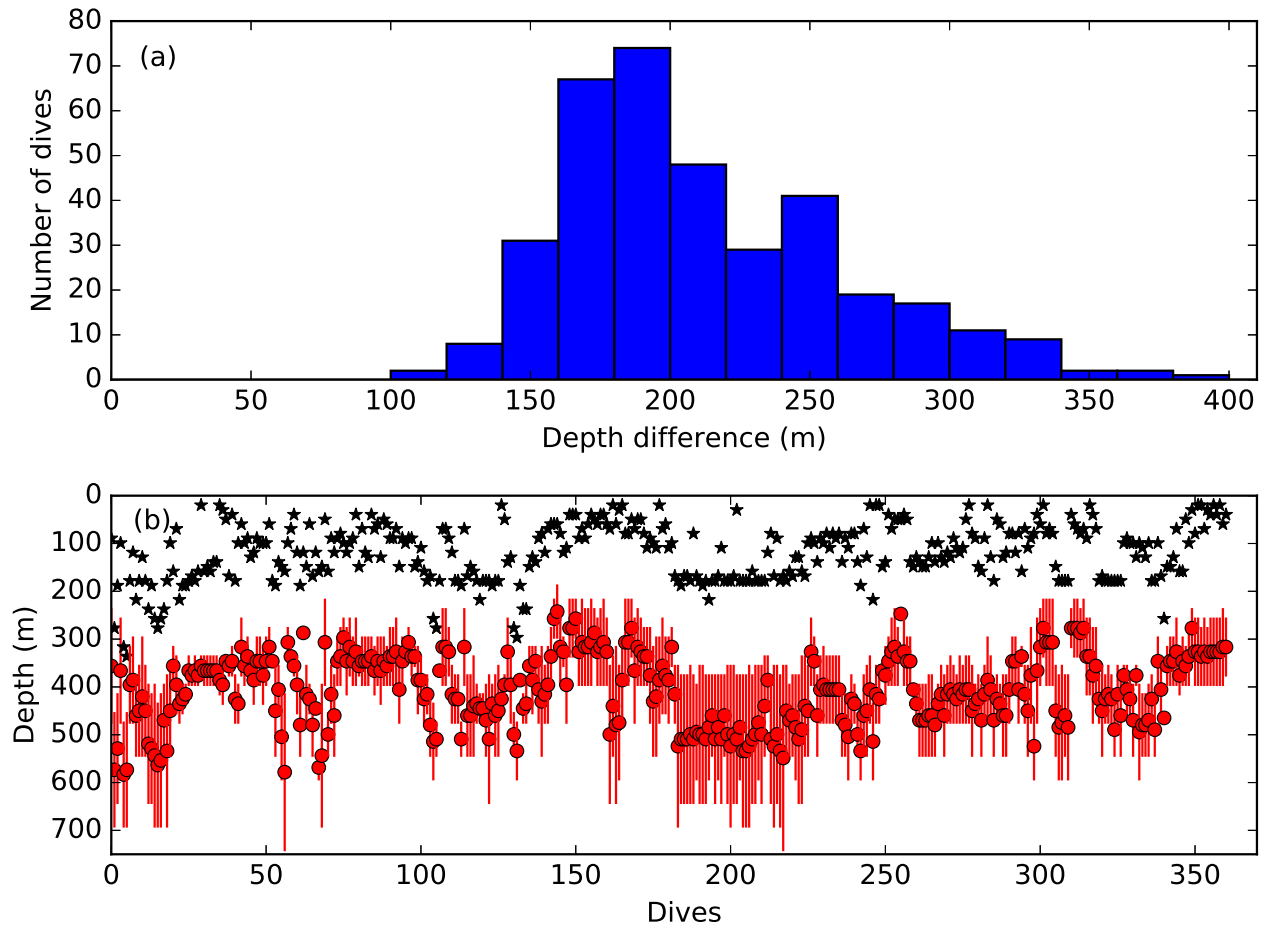


Figure S3. Separation distance between Winter Water and meltwater mixture for casts on Figure 4. (a) Histogram of depth difference between meltwater mixture and Winter Water. (b) Detailed depths of WW bottom (black stars) and meltwater mixture (red circles, lines showing the thickness).